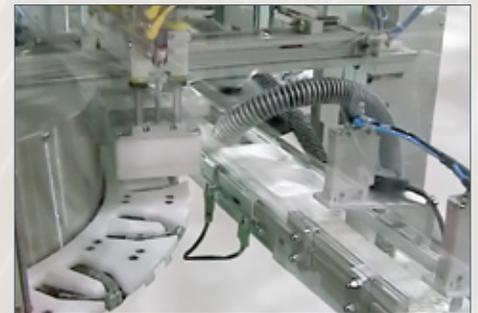
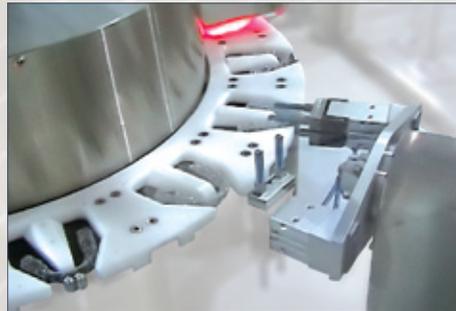


Medical Device

Robotic Part Unscrambling & Loading System

Sort, Orient, Read Code, Send Data & Load Carrier



Process, Features & Benefits

Parts are sorted and presented by means of a Farason FaraFeeder parts recirculating system, consisting of a series of tiered conveyors with an elevating bucket connecting the bottom-most return conveyor to the upper metering conveyor.

Bulk parts are manually dumped into a prefeeder hopper bin with a live belt bottom that deposits parts onto the upper metering conveyor on demand, based on parts level monitored on the metering belt. Parts pass under adjustable distribution paddle wheels and transfer onto a vision conveyor, spread out for vision acquisition.

An Adept Cobra 800, equipped with vision guidance software, utilizes an overhead-mounted camera and top lighting to discern qualified parts, pick them, and load them into an indexing rotary dial that is tooled with part-specific fixtures to maintain proper component location.

First camera on dial looks for customer code location to determine part orientation. If needed, parts are removed from the fixture, rotated 180°, and placed back into the same fixture.

Second camera on dial reads customer code character string and relays the data to the host computer for down-line collating and regrouping of orders. Vision system was purchased and integrated from SV Research, Harrisburg, PA. Vision system is capable of recognizing characters on uneven, wavy and curved surface.

Conventional 2-axes Cartesian pick and place, equipped with a vacuum end effector, removes parts from the dial fixtures, two at a time, and loads them into their respective carrier pucks.

More Information

For more information on this, and many other Farason projects, please visit our website at www.farason.com or call us at (610) 383-6224.